



ENVIRONMENTAL LEADERSHIP IN TOURISM

A partnership between

Rebuild America
(Rebuild Hawai'i Consortium)
&

School of Travel Industry Management
University of Hawai'i at Mānoa (TIM/UH)

Ivo Martinac, PhD, Assoc. Spec.
Director, Environmental Sustainability in Tourism Program (TIM/UH)

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The School of Travel Industry Management is one of the, nationally and internationally leading programs in the field of hospitality, tourism and transportation management and research.

It is accredited by the Commission for Programs and Hospitality Administration and the World Tourism Organization.

TIM pioneered the integration of every aspect of the travel industry under a single discipline. Built on a foundation of management science, TIM draws on a broad range of disciplines within a dynamic framework to prepare tomorrow's leaders in the travel and tourism field in Hawai'i, the Asia-Pacific region and across the globe.

TIM is uniquely positioned in a living laboratory for the travel and tourism industry. Hawai'i has world-class hotels and resorts, a unique natural environment found nowhere else in the world, a multi-ethnic and indigenous culture, a mature distribution and delivery system and a well-established market. There is no better place in the world to teach and learn about this industry (and its many forms) than in Hawai'i.

In addition to its focus on educating and training future industry leaders in formal and professional development settings, TIM interacts closely with the hospitality, tourism and travel industry, serving as a catalyst to stimulate industry innovation and progress.

2004, 2005 – Good years for tourism on Hawai'i

Hawaii's hospitality industry is experiencing a period of unprecedented growth.

The total number of air and cruise ship arrivals in 2004 increased by 8.5% compared to 2003, while total expenditures of air and cruise ship arrivals increased by 8% during the same period.

Hawaii 2005: visitor expenditures increased 8.4 % to \$11.5 billion; total arrivals -- 7.4 million visitors. 183,800 jobs and about 23 percent of the State's tax revenues; hotel revenue \$3 billion, REVPAR second in US; real estate investment boom \$1 billion

Growing Environmental Loads

While this economic growth is, undoubtedly, a highly welcome indicator of the industry's recovery from the detrimental effects of 9/11, SARS and other events in the recent past, it is essential to make sure that increased earnings are not paralleled by commensurately enhanced environmental loads or degradation of Hawai'i's limited natural resources and unique environmental assets.

Considering Hawai'i's continued dependence on imported fossil fuels and goods, its limited water resources, the frailty of its coastal and other natural resources and systems, increasing environmental impacts (to land, water and air), as well as growing amounts of waste and wastewater that need to be disposed of and handled, it is essential that the development of this important industry be managed responsibly.

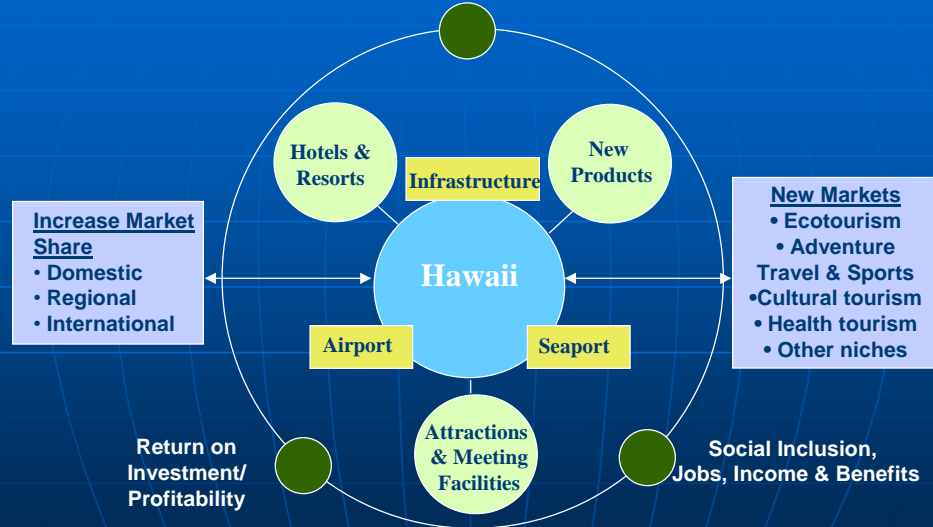
Vision and Mission

TIM sees one of its key tasks to assist the hospitality industry in evolving towards the level of environmental responsibility and resource efficiency that will allow it to develop and prosper, without depleting its resource base, or adversely impacting the quality of the unique natural (and cultural) environments that constitute the essence of its attractiveness and competitive advantage.

TIM's partnership with Rebuild America (Rebuild Hawai'i Consortium) will substantially enhance its ability to assist the hospitality industry in adopting into its agenda cutting-edge environmental stewardship, particularly as relates to conserving resources (energy, water, etc.) and increasing the efficiency of their use in hospitality facilities and destinations.

SMART TOURISM GROWTH – PURSUING THE TRIPLE BOTTOM LINE

Preservation and Enhancement of Cultural and Natural Resources



From Hawkins, Lane Lecture (TIM/UH) 2006

Hawai'i Center for Environmental Leadership in Tourism (HCELT)

To this end, TIM intends to establish a Center (Hawai'i Center for Environmental Leadership in Tourism) with the mission to

- Offer professional and academic training/educational programs, disseminate information
- Conduct research
- Provide consultancy services
- Engage in community outreach,

aimed at increasing the efficiency of resource utilization, quality of environmental management and related expertise in the hospitality industry.

The Center's key mission is to assist the hospitality industry in integrating state-of-the-art environmental stewardship (technologies, processes and methods/behaviour) in its operations, aimed at optimizing its overall economic, environmental and social performance (triple bottom line).

Focus Areas

The Center's work is intended to focus on a number of key issues relevant to hospitality facilities (hotels/resorts, food & beverage facilities, convention centers and related infrastructure) and destinations, including:

- Resource (energy, water, etc.) conservation and utilization efficiency
- Waste-water management
- Waste minimization and management
- Smart growth and land management

A partnership for leadership in environmental responsibility

- Developing a regional and international leadership role in environmental stewardship and resource efficiency and management in tourism.

While the Center's initial focus will be on activities in Hawai'i and Asia-Pacific, this will not exclude future partnerships or cooperative projects in other parts of the world. To this end, the Center aims at making its expertise available wherever needed and applicable.

- Assisting the industry in becoming more resource efficient and environmentally responsible, thus improving bottom-lines, enhancing corporate profile, increasing its attractiveness to a more environmentally conscious clientele, improving its community profile through more efficient resource sharing and enhanced social responsibility.

- Providing state-of-the-art training and education to stakeholders from the private (industry) and the public (administration, colleges, schools, etc.) sectors, as well as NGOs and other organizations in Hawai'i, Asia-Pacific (including China).
- Assisting public and private stakeholders in designing, developing and operating show-cases of profitable, resource-efficient and environmentally responsible hospitality facilities (including hotels, resorts, food & beverage facilities etc.) in Hawai'i and Asia Pacific

A partnership focused on implementation

- Pursuing research activities catering to existing needs in the industry, ultimately aimed at helping the industry implement concrete and cost-efficient measures of resource efficiency and environmental responsibility.
- To that end, The Center aims at measuring its performance not primarily by the number of academic publications produced, but rather by parameters including actual amounts of resources saved as well as real economic benefits achieved by clients/partners within the context of projects completed.

A partnership for smart growth and development

- Providing the industry with cutting edge expertise relevant to environmental stewardship by drawing on the combined multidisciplinary expertise from a wide variety of professions and academic domains available through TIM's extensive national and international network (including partners from industry, universities, professional organizations and cognizant bodies).
- Pursuing tasks and projects in harmony with the goals defined in the Hawai'i Tourism Development Plan 2005-2015. To the extent possible, the Center will strive to assist the tourism industry in exceeding the minimum levels of resource efficiency and environmental performance specified in existing guidelines and standards, while at the same time aiming at strengthening economic bottom-lines.
- Assisting the industry in identifying and pursuing responsible alternatives of growth and development.

Energy

- Decreasing fossil fuel dependence in the tourism sector – exploring opportunities for utilizing renewable and distributed energy systems
- Energy utilization in key Hawai'i destinations – modeling of energy flows, opportunities for increased efficiency and savings (systems analysis)
- Retrofitting hotels/resorts and developing new facilities towards best-practice-level energy and environmental efficiency
- District (and distributed) power systems for high-density tourism destinations

Energy & Water

- Integrated energy system retrofitting/development in urban (semi-urban) destinations
- Opportunities, challenges and risks in implementing sustainable (energy, environmental and other relevant) technologies in the tourism sector
- Financing opportunities for implementing new energy technologies.
- Water resource conservation and management in the tourism industry– opportunities and challenges.
- Waste-water management

Environmental management

- Reducing environmental impacts (emissions, waste generation) through higher resource efficiency
- Mitigating/managing the impacts of tourism in coastal zones and island communities
- (Developing and implementing the use of) state-of-the-art IT-systems for more efficient resource and environmental management
- Developing (continuous) sustainability assessment (monitoring) and reporting systems for hotels/resorts

Environmental Management

- Waste minimization and management
- Continuous monitoring of key parameters defining the dynamic bearing capacity of relevant destinations
- Impacts of the cruise industry on resource consumption and environmental management
- Applying the Clean Development Mechanism and other incentive programs towards responsible tourism development (cooperation with University of Cape Town) – focus on Asia-Pacific.

Business development / smart growth

- Smart destination growth through resource efficiency and environmental stewardship
- Responsible tourism as a driver for green business development – developing new products/services destinations, including in mature mass-tourism markets
- Visioning and evaluating potential tourism development scenarios for the Hawai'i tourism industry, and assisting the industry in pursuing the alternative(s) that will result in optimum triple-bottom lines
- Redefining Hawai'i's tourism product – achieving more with less? – developing high-end, high-quality product alternatives
- Decreasing operational costs in hospitality facilities through more efficient utilization of resources – life-cycle-costing approach – “Resource&Cost Hunt”

Business development / smart growth

- Smart purchasing strategies for the tourism industry (resource-efficient technology, appliances, equipment, waste-minimization, etc.)
- Retrofitting and redevelopment in the tourism industry
- Environmental impact scenarios of emerging markets and tourism products
- Risk-sharing and financing mechanisms in developing responsible tourism practices
- Environmental risk management in coastal tourism destinations
- Responsible tourism development in mass destinations

Transport / Infrastructure

- Smart transport solutions for tourism destinations (public transport, fuel-efficient vehicles, alternative fuels and modes of transport)

Education – Training – Professional Development

- Identifying the needs for relevant education in the tourism industry (environmental and corporate responsibility) – developing training programs aimed at different stakeholder categories, capacity building and workforce development
- Environmental (responsible tourism) capacity building in local communities on Hawai'i (Asia Pacific)
- Education on resource-efficient practices and technologies for different stakeholders from the public and the private sector

Education – Training – Professional Development

- **Developing guidelines for resource-efficient and environmentally friendly hotel/resort, food & beverage and other hospitality facilities**
- **Organizing workshops, seminars and conferences for industry stakeholders**
- **Integrating state-of-the-art environmental stewardship into all TIM programs and activities – “teaching by doing”**

Outreach

- **Educating communities and the traveling public towards more responsible behaviour**
- **Disseminating relevant information to private and public stakeholders**

Key partnerships

While the Center will act as the lead partner, the activities envisioned will be carried out in close cooperation with key stakeholders from the public and the private sector.

Initially, these will include:

Hospitality Industry

- Hawai'i hotel/resort industry (including international partners: Hilton International and Scandic Hotels have agreed to provide access to their extensive resource utilization and environmental management databases)
- Discussions with Marriott/Starwood under way
- Hawai'i food & beverage industry
- Hawai'i convention facilities

Government & Administration

- **US Department of Energy (Rebuild America)**
- **Department of Business, Economic Development, and Tourism (DBEDT)**
- **Hawai'i Green Business Program (DBEDT, DOH, Chamber of Commerce)**
- **Hawai'i Tourism Authority**

Utilities

- **Hawai'ian Electric Company**
- **Board of Water Supply**

Academic partners

UH SYSTEM

- Center for Smart Building and Community Design, UH
- School of Architecture, UH
- University of Hawai'i Sea Grant College Program
- East-West Center, UH
- Hawai'i Research Center for Futures Studies, UH
- Kapiolani Community College, Hospitality/Tourism Program
- UH Maui Community College (Sustainable Living Institute)

Academic Partners

US

- George Washington University, International Institute of Tourism Studies, Washington, DC
- Northern Arizona University, Flagstaff, AZ



INTERNATIONAL

- BEST Education Network
- Royal Institute of Technology, Stockholm, Sweden
- Shandong University (Joint KTH-SDU Center for Industrial Ecology), Jinan, PR China
- Partner Universities in South and South-East Asia (Including AIT, Bangkok; University of Moratuwa, Sri Lanka and others)
- Partner Universities/Organizations in the South Pacific (Fiji, Palau, Tahiti)
- University of Cape Town (Energy Modeling, Clean Development Mechanism)



NGOs and Non-Profit Organizations

- Sustain Hawai'i
- Professional Associations
- Hawai'i Hotel & Lodging Association
- Native Hawai'ian Tourism and Hospitality Association
- The Natural Step/Sweden

Facilities targeted

- Buildings of primary interest will include lodging facilities (resorts, hotels, motels, etc.), food & beverage facilities, conference facilities and other facilities utilized by the hospitality industry.
- Particular emphasis will be given to increasing overall resource conservation and utilization efficiency at destination level. This will allow dealing with related issues both within the context of individual facilities and in a wider system perspective.
- As an essential part of the process of resource conservation and effectivization, a monitoring methodology will be developed which will allow for the continuous collection and evaluation of key metrics and consumption indicators. This will provide crucial feedback to operators as well as facilitate evaluating the success of conservation measures with respect to technologies chosen, retrofits made and procedures enforced.

Current Projects

- Green Restaurant
- Knowledge Export (South Pacific)
- Workforce Development
- Knowledge Portal
- Dashboard
- Hawai'i Tourism Futures Visioning
- Resource Efficiency and Conservation in Hotels/Resorts in South-East Asia (Thailand)